POWERNAIL® CO.

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Operation and Maintenance Manual

Powernail FLEX Pneumatic Powernailer®

FOR TONGUE AND GROOVE FLOORING 3/8" TO 3/4"

For this parts list and other Powernailer schematics, please visit the Powernail Parts Store at http://www.powernail.com

WARNING

Read this manual before you use this Nailer. Follow all safety warnings and instructions. If you are uncertain about the operation of the Nailer, call us directly at 1-800-323-1653 for assistance or contact the closest Powernail Dealer for help. Please retain this information for future reference.

TO PREVENT ACCIDENTAL INJURIES:

Always wear approved front and side **EYE PROTECTION** when operating this Nailer. Others in the work area should also wear front and side **EYE PROTECTION**. Eye protection will help guard against flying nails and debris, which could cause severe eye injury.

EAR PROTECTION may be required to prevent hearing damage when there are high noise levels in the work area.

Always **DISCONNECT THE AIR SUPPLY** before making any adjustments, repairing, clearing jams or when the Nailer is not in use.

Never attach the female end of a quick disconnect to the Nailer. This will trap air inside the Nailer and permit it to be discharged. Only the unrestricted male connection should be attached to the Nailer

Use only regulated compressed air, do not use bottled gases of any kind to power this Nailer. Normal air pressure should not exceed 110 psi or damage to the Nailer and seals may occur. Excess air pressure can cause the Nailer to explode.

THE TRIGGER IS A SAFETY DEVICE and should only be pulled when the Nailer is in proper position on the work surface and before the plunger is struck with the mallet. Do not tie or tape down the safety trigger as the Nailer could discharge if dropped on the plunger. The Nailer will not fire unless the trigger is pulled before the mallet blow.

Do not use the trigger safety as a lock up for the plunger then rack the wood using the locked up Nailer body. It will severely damage the mechanism and the Nailer.

DO NOT USE THE METAL END OF THE MALLET TO STRIKE THE PLUNGER, use the rubber capped end only.

Never place any part of the body in the discharge path of the Nailer when air is connected to the Nailer. Always connect air hose to unloaded Nailer to prevent any accidental discharge from occurring.

Never leave the Nailer unattended while it is connected to an air supply.

DESCRIPTION

The Powernail FLEX Pneumatic Nailer is the latest model designed to bring Powernail quality to a pneumatic nailer. For those looking for the ease of use of a pneumatic tool, the Powernail FLEX is designed for use with only 1" , 1-1/4", 1-1/2" and 1-3/4" (18 gage) Powercleats® nails.

The Powernail FLEX can nail down 3/8", 1/2", 5/8" and some exotic 3/4" tongue and groove hardwood flooring through the use of easy to change, no mar pad and shims. For a superior pneumatic Nailer, look to the company that has been the industry's quality leader for over 50 years, POWERNAIL® COMPANY, INC.

OPERATION

Read these instructions carefully before you use the Nailer.

To use the Powernail Flex, adjust the nailer FLEX foot to a sample of your flooring (see instructions on page 3).

When the nailer foot is adjusted to your flooring, simply place the nailer on the floor and pull nailer back so locating locating ears catch the edge of the floor above the tongue. Pull the safety trigger and tap the plunger with the rubber-capped mallet-end to let the Nailer drive and set the nail at the correct 45 degree angle.

To Load the Powernail Flex:
Place up to one stick (100) of Powercleats® (18 gage) nails, 1" , 1-1/4" , 1-1/2" or 1-3/4" long into the nail channel feed slot. Pull back the spring loaded nail pusher over the nails until it contacts the last nail and slowly release the nail pusher.

To Unload
To remove nails from the nail channel, pull the two round knobs on the nail pusher together. This will clear it from the nail path. Then turn the nailer over so the nails slide out of the channel.

FLEX Foot Adjustment:

Wood varies from one manufacturer to the next. The different wood profiles may be due to height and length of the flooring tongue and whether or not there is a nail pocket.

First, loosen the two hex bolts under the FLEX foot with the Allen Wrench supplied with the nailer. (Figure 1.)

Next, set the nailer on a sample of your flooring (see Figure 2).

Use the adjustment lever at the back of the nailer foot to raise or lower the nailer to the wood.

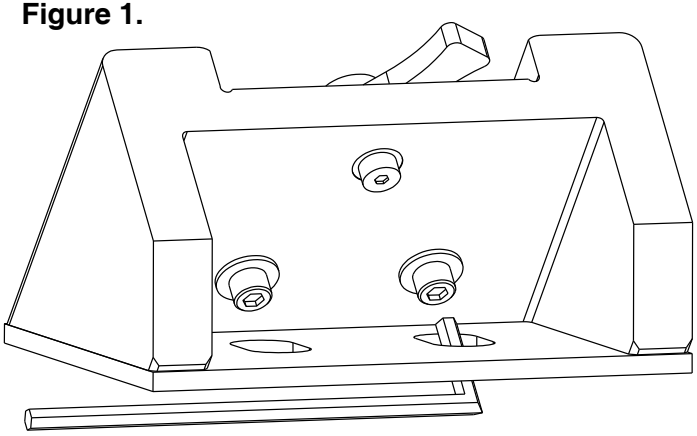
Match the Adapter Foot Locating Ear so that it is pointing into the 90° angle created by the tongue and the top of the wood (see Figure 3).

For wood with a nail pocket, line up the Locating Ear so at the top of the nail pocket.

When the adjustment lever is in the correct position for your wood sample, tighten the two hex bolts to lock the FLEX foot into place.

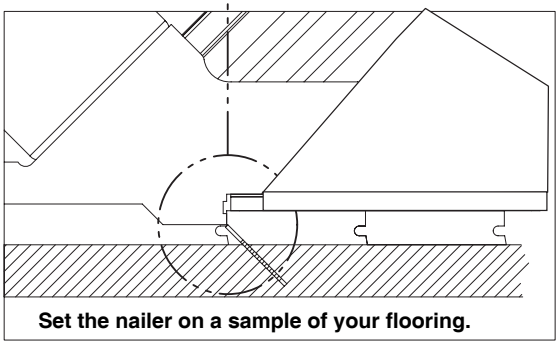
Always check your adjustment with a sample to ensure the nail is driving into the nail pocket

Figure 1.



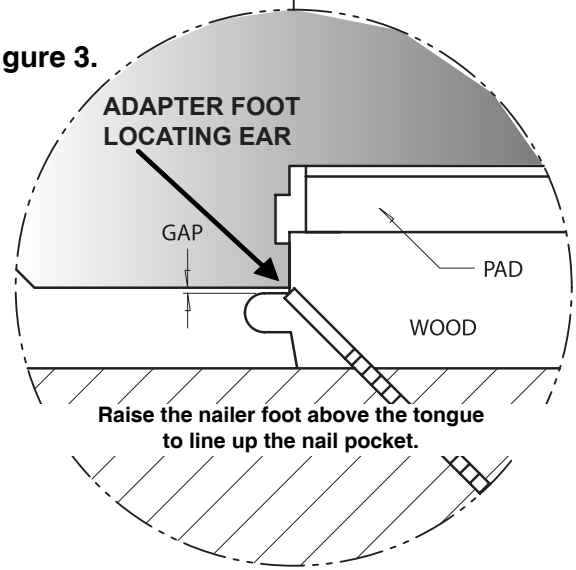
1. Loosen 2 hex screws.
2. Raise or lower the FLEX to your wood sample.
3. Match the Locating Ear to the nail pocket.
4. Tighten 2 hex screws.
5. Test wood sample with new adjustment.

Figure 2.



Set the nailer on a sample of your flooring.

Figure 3.



Raise the nailer foot above the tongue to line up the nail pocket.

WARNING It is not necessary to hit the Nailer hard to activate it. Never hit the Nailer with excessive force or with the metal end of the mallet, this will damage the Nailer.

Never use the Safety Trigger interlock to lock up the plunger and rack the wood with blows to the Nailer body. This will severely damage the safety mechanism and Nailer. This abuse and damage is not covered by the warranty.

Before each use check all screws to be sure they are tight. Shock and vibration can loosen screws. Do not over tighten any screw.

AIR SUPPLY:
The air must be clean and dry. Dirty and/or wet air will damage the Nailer. A combination filter-regulator-lubricator is required for proper Nailer performance and should be placed close to the Nailer per manufacturer's recommendations.

Fill the lubricator with Mobile DTE Light Synthetic Hydrocarbon Oil. Adjust the lubricator to the manufacturers' recommendations. Do not over oil the Nailer, as excess oil will be discharged with the spent air and could stain the wood flooring, walls or furnishings. **We will not be responsible for oil stains.**

WARNING Detergent oil is not recommended and may damage the seals. Consult the filter regulator lubricator manufacturer's recommendations for proper operation, settings and unit maintenance.

The air source must continuously deliver 70 to 110 psi and
3-1/2 cubic feet of air per minute to operate the Nailer. Connect a clean air hose and air regulator to the Nailer.

Check for air supply leaks that waste air and starve the Nailer of air thereby reducing its performance.

LUBRICATION:
If you do not use an in line lubricator, you must lubricate the Nailer manually. The frequency of lubrication is dependent upon the duty cycle of the Nailer. Continuous duty requires more frequent oiling than intermittent duty.

At least every eight (8) hours place two to four drops of Mobile DTE Light Oil, supplied with your Nailer, into the disconnected air line male connector attached to the Nailer.

WARNING Do not over lubricate the Nailer, excess oil mist or drops will be vented with spent air when over lubricated. Excess oil could stain the wood flooring, walls or furnishings. Dry fire the Nailer, without nails, to purge excess oil, before you begin to nail down flooring. **We will not be responsible for oil stains.** Before storing the Nailer, lubricate and cycle the Nailer in insure internal parts are oil protected from corrosion.

PARTS & SERVICE:
When ordering parts include the part number, part description, Powernailer model and serial number. Be sure to state the quantity of the part(s) required. Contact your Powernail Dealer for the necessary parts or service.

WARNING Never work on the Nailer if the air line is attached. Always disconnect the air line from the Nailer first.

NAILER DISASSEMBLY:

TO REPLACE RUBBER BUMPER (#31):
1. Disconnect the air supply

2. Remove the four (4) cap screws holding the Adapter Foot, Foot and Nail Channel assembly to the main Body (see illustration).

3. Pull the Rubber Bumper out of the cylinder bore. Replace the old Bumper if it shows signs of wear or it is split.

4. Reverse these steps to reassemble the Nailer. Be sure to align the Driving Blade with the slot in the Nail Channel Assembly while you reassemble the Nailer. NEVER FIRE THE NAILER WITHOUT THE RUBBER BUMPER INSTALLED, IT WILL DAMAGE THE NAILER.

TO REPLACE DRIVING BLADE(#17):
1. Disconnect the air supply

2. Remove the four socket head cap screws holding the Adapter Foot, Foot and Nail Channel Assembly to the body.

3. Remove the Rubber Bumper

4. Pull the Driving Blade with pliers until the Piston is fully extended outward towards the bottom of the cylinder.

5. Use the 15/16" box wrench supplied to unscrew the Driving Blade Jam Nut and remove it. Hold the Piston

from turning while unscrewing the Jam Nut by holding the piston hex with the 1-1/8" box wrench supplied.

6. Push out the 1/4" diameter blade retaining Dowel Pin and remove the broken Driving Blade stub.

7. Install a new Driving Blade in the slot and replace the Dowel Pin. Screw on the retaining Jam Nut using the same tools. If the Jam Nut becomes worn and loose after frequent removals, it should be replaced.

8. Check the fit, there should be some sideways movement between the Driving Blade and the Jam Nut assembly. This is desirable and helps the blade to align itself with the mating parts.

9. Reassemble the components. Be sure to align the Driving Blade with the slot in the Adapter Foot Assembly, it goes in only one way.

SEAL REPLACEMENT:
There are 7 seals that may require replacement. We recommend that you have your POWERNAIL Dealer replace the Seals.

SEAL KIT:
You may choose to buy a Seal Replacement Kit and replace the seals yourself. It is good practice to replace all seals at one time regardless if only one seal needs replacement.

SEAL DESCRIPTION & NUMBER:
1. Piston U cup Lip Seal (#19)
2. Return Cylinder U cup Lip Seal (#20)
3. Piston Rod U cup Lip Seal (#21)
4. Rubber Seat (#30)
5. Plunger Seal Set (#32)
6. Plunger Wiper Seal (#33)
7. Return Cylinder 0 Ring Gasket (#34)

To change Seals follow these procedures. Be sure the air line is disconnected from the Nailer first before making any repairs. Consult the illustration for the name and location of the following component parts.

DRIVING BLADE ASSEMBLY REMOVAL:
1. Disconnect the air supply.

2. Remove Rubber Plunger Cap (#18).

3. Unscrew & remove Body Cap (#2).

4. Push Safety Yoke (#26) aside and unscrew the three 10-32 cap screws holding the Plunger (#13) to the Return Cylinder (#12).

5. Pull the Plunger up and out of the Nailer Body (#1) cavity.

6. Remove the Return Cylinder 0 Ring Gasket (#34) located on the top of the Return Cylinder under the Plunger.

7. Turn the Nailer over and remove the four cap screws (#48), that fasten the Adapter Foot and Nail Channel Assembly to the Nailer Body and lift the Assembly off the Body.

8. Remove the Rubber Bumper (#31).

9. Pull the Driving Blade Assembly out of the Nailer Body by pulling on the Driving Blade.

10. Hold the Piston Rod (#10) with an 11/16" socket over its hex end opposite the Piston. **Do not use pliers or a vise anywhere on the metal parts, they can damage the sealing surfaces.**

11. Use the supplied box wrenches to remove the 5/8"-18 Jam Nut (#49). Remove the Dowel Pin (#42) and Driving Blade (#17).

12. Unscrew the Piston from the Piston Rod using the supplied box wrenches and separate the Piston, Piston Rod and Return Cylinder.

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TO REPLACE THE SEALS:

Plunger Seal Set (#32):
1. Remove the Teflon® Seal and its O-ring expander from the Plunger groove using a bent paper clip or pick. Be sure not to scratch the inside walls of the seal groove with the wire hook.

2. Clean out the seal groove. Place a new O-ring into the seal groove by stretching it over the Plunger body. Make sure the O-ring is not twisted in the groove. Place a new Teflon® Seal Ring into the seal groove over the O-ring.

3. Carefully push the Teflon® Seal Ring over the edge of the Plunger with your thumbs and into the groove. Do this as quickly as possible to reduce stretching of the Teflon® Seal Ring. DO NOT OVER STRETCH THE TEFLON® SEAL RING. Be sure the Teflon® Seal Ring is centered all around the seal groove and not twisted.

4. Wipe off the Seal surface with a clean rag and lubricate it generously with the supplied Mobile DTE Light air tool oil lubricant.

Rubber Seat (#30):
1. Remove the Cylinder Sleeve (#14). The Cylinder Sleeve would slide out of the Nailer Body when you pull out the Driving Blade

2. Remove the metal Support Ring (#29) and Rubber Seat from inside the Nailer body. NOTE THAT THE CHAMFER ON THE INSIDE OF THE RUBBER SEAT FACES THE BOTTOM OF THE NAILER. Do not reverse the direction of the chamfer when you replace the Rubber Seat.

3. Replace the Rubber Seat, Support Ring and Cylinder Sleeve. Be sure to re install the steel Cylinder Sleeve with the chamfered inside edge facing the BOTTOM of the Nailer.

Piston U Cup Lip Seal (#19):
1. Remove the old Piston U Cup Lip Seal from the Piston using a bent paper clip or pick, being careful not to scratch the inside walls of the seal groove or the edge of the Piston with the wire hook.

2. Clean out the seal groove. Place a new U-Cup Lip Seal into the groove. Make sure the lip seal is not twisted in the groove and the lips face the top of the Nailer. See the sketch on next page (#19).

3. Carefully wipe off the U Cup Lip Seal surface with a clean rag and lubricate it generously with the supplied Mobile DTE Light air tool oil lubricant.

Return Cylinder U Cup Lip Seal (#20):
1. Use a bent paper clip or pick to remove the old U Cup Lip Seal from the internal seal groove inside the Return Cylinder. Be careful not to scratch the inside walls of the seal groove with the wire hook.

2. Clean out the seal groove. Place a new U Cup Lip Seal into the groove, be sure it is not twisted in the groove. Be sure the lips are facing the inside of the Return Cylinder as shown in the sketch on next page.

WARNING The U-Cup Lip Seals #20 and #21 look alike, but they are different, DO NOT mix them up.

3. Carefully wipe off the Lip Seal surface with a clean rag and lubricate it generously with the supplied Mobile DTE Light air tool oil lubricant.

Piston Rod U-Cup Lip Seal (#21):
1. Remove the old U-Cup Lip Seal from the seal groove with a bent paper clip or pick using care not to scratch the inside walls of the seal groove with the wire hook.

2. Clean out the seal groove and install a new U-Cup Lip Seal. Be sure the Lips are facing the right direction and are not twisted in the groove. See the sketch on next page.

Plunger Wiper Seal (#33):
1. Use a bent paper clip to pick out the felt Wiper Seal out of its groove in the Body Cap (#2).

2. Clean out the groove and insert a new felt Wiper

Seal. Saturate the new felt Wiper Seal with oil.

Return Cylinder O-Ring Gasket (#34):
1. Place a new O-Ring Gasket in the groove on top of the Return Cylinder when you reassemble the Driving Blade Assembly.

2. Wipe off the O-Ring Gasket seal surface and lubricate it generously with the supplied lubricant, Mobile DTE Light air tool oil lubricant.

REASSEMBLING THE NAILER:
1. Be sure the Rubber Seat, Support Ring and Cylinder are installed in the Body and are facing the correct direction.

2. All seal surfaces must be clean and lubricated generously with the supplied Mobile DTE Light air tool oil lubricant.

Replace any part that shows signs of wear.

3. Use care when installing the seals into their respective cavities. Be sure the Seals are contained in their groove and do not come out as the parts slide together. Generous cavity lead in chamfers have been provided to help Seal installation.

4. Carefully insert the Piston Rod into the Return Cylinder and screw the Piston onto the rod. Be sure the Piston is facing the correct way, ears up, hex down.

5. Assemble the Driving Blade, Dowel Pin and Jam Nut on to the Piston Rod.

6. Insert the Driving Blade Assembly up into the bottom of the Nailer Body Cylinder.

7. Be sure there is a new O-Ring Gasket in the top groove of the Return Cylinder.

8. Insert the Plunger into the top cavity of the Body. Line up the holes and install the three Plunger retaining screws. It is important that the three #10-32 screws are tight or air leakage will occur.

9. Install the Body Plate.

10. Position the Safety Yoke into the Plunger Groove.

11. Install the Body Cap and Plunger Rubber Cap.

12. Turn the Nailer upside down. Install the Rubber Bumper, Nail Channel Assembly and Adapter Foot. Be sure to align up the Driving Blade with the slot in the Foot before the Nailer is closed up.

13. NEVER FIRE THE NAILER WITHOUT THE RUBBER BUMPER INSTALLED, IT WILL DAMAGE THE NAILER BEYOND REPAIR.

TO CLEAR A NAIL JAM:
1. It helps to tap the Driving Blade back to the retracted position before trying to remove a jammed nail. A spare Driving Blade works best for this.

2. Try to pull the jammed nail out of the gate with a pair of long nose pliers. If this does not work remove the four (4) cap screws holding the Foot, Gate and Nail Channel Assembly together.

3. Separate the Foot and Gate with a screw driver just enough to clear out the jammed nail.

4. Put thread locking compound on all screws and reassemble the components.

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Powernail FLEX Parts List

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ITEM #	PART NO.	DESCRIPTION	Qty Req'd	Key Ref.	Assy/Kit
1	09-50P-3001	Body	1	F	
2	09-50P-3002	Cap	1	S	
3	09-445-29815	Handle - Extra Long	1	S/A	A-5
4	09-445-29703	Handle - Long	1	S/A	A-2
5	09-445-29703.1	Handle - Short	1	S/A	A-3
6	09-445-29704	Handle Half Cover	1	S/A	A-2,A-3,A-5
8	09-50P-3006	Foot	1	S/A	A-4
9	09-50P-3008	Channel	1	S/A	A-4
9B	09-50P-3009	Channel - Long	1	S/A	A-6
10	09-50P-3010	Piston Rod	1	S/A	A-6
11	09-200-3011	Piston	1	S/A	A-6
12	09-200-3013	Return Cylinder	1	S/A	A-6
13	09-200-3014	Plunger	1	S/A	A-6
14	09-200-3015	Cylinder Sleeve	1	S	
15	09-50P-3042	Gate (Replaces 09-50P-3016)	1	S/A	A-4
16	09-50P-3017	Gate Plate	1	S/A	A-4
17	09-50P-3018	Driving Blade	1	S/A	A-6
18	09-200-3022	Rubber Cap	1	S	
19	09-200-3026	Piston U-cup Lip Seal	1	K/S/A	A-1,A-6
20	09-200-3027	Return Cylinder U-cup Lip Seal	1	K/S/A	A-1,A-6
21	09-200-3028	Piston Rod U-cup Lip Seal	1	K/S/A	A-1,A-6
22	09-200-3034	Nail Pusher Spring	1	S/A	A-4,A-9
23	09-200-3035	Spool	2	S/A	A-4,A-9
24	09-445-29832	#10-32 X 3/4 SHCS (Plunger)	3	S/A	A-6
25	09-200-3057	#10-32 X 1/2 FHCS Slotted (Pad)	4	S	
26	09-445-29707	Safety Yoke	1	S	
27	09-2003019	Body Plate (.035 Thick)	1	S	
28	09-445-29720	Trigger	1	S/A	A-2,A-3,A-5
29	09-445-29721	Support Ring	1	S	
30	09-445-29723	Rubber Seat	1	K/S/A	A-1,A-6
31	09-445-29724	Rubber Bumper	1	S	
32	09-445-29725	Plunger Seal Set	1	K/S/A	A-1,A-6
33	09-445-29729	Plunger Wiper Seal	1	K/S/A	A-1,A-6
34	09-445-29731	Return Cylinder O-ring Gasket	1	K/S/A	A-1,A-6
35	09-445-29816	Trigger Cable - Extra Long	1	S/A	A-5
36	09-445-29732	Trigger Cable - Long	1	S/A	A-2
37	09-445-29732.1	Trigger Cable - Short	1	S/A	A-3
38	09-445-29733	Safety Yoke Springs	2	S	
39	09-445-29735	Nail Pusher	1	S/A	A-4,A-9
40	09-445-29735.2	Nail Pusher Knob	1	S/A	A-4,A-9
41	09-445-29739	1/4 X 3/4 Dowel Pin (Trigger)	1	S/A	A-2,A-3,A-5
42	09-445-29740	1/4 X 1/2 Dowel Pin (Driving Blade)	1	S/A	A-6

KEY: S=Sold Separately, A= Sold as part of assembly, F=Factory replacement only, K=Sold as part of a Kit

ITEM #	PART NO.	DESCRIPTION	QTY REQ'D	Key/Ref	Assy/Kit
43	09-445-29741	1/8 X 5/8 Roll Pin (Gate)	2	S/A	A-4
44	09-445-29742	1/4-20 X 7/8 SHCS (Xl - Handle Half)	1	S	
45	09-445-29743	1/4-20 X 1 SHCS (Cap)	4	S	
46	09-445-29744	1/4-20 X 3/4 SHCS	4	S/A	A-2,A-3,A-5
47	09-445-29745	#10-32 X 1-1/4 SHCS (Knob)	1	S/A	A-4,A-9
48	09-445-29747	1/4-20 X 1-1/4 SHCS W/patch (Foot)	4	S	
49	09-445-29748	5/8-18 Jam Nut (Driving Blade)	1	S/A	A-6
50	09-445-29750	#8-32 X 1-1/2 FHCS (Spacer)	2	S/A	A-4
51	09-445-29751	#8-32 Locknut (Spacer)	2	S/A	A-4
52	09-445-29754	#10-32 X 1/2 SHCS (Foot)	4	S/A	A-4
53	09-445-29756	1/4 X 1 Spacer (Channel)	2	S/A	A-4
54	09-445-29758	1/4 Split Ring Lock Washer (Foot)	4	S	
55	09-445-29759	3/8 NPT 45 Degree Street Elbow	1	S	
56	09-445-29760	#8-32 X 1/4 BHCS (Cable)	1	S	
57	09-445-29822	#10-32 X 3/4 SHCS w/patch (Gate)	3	S/A	A-4
60	09-50P-3040	Channel Plate	1	S/A	A-4
61	09-50P-3041	#6-32 X 3/8 BHCS (Channel Plate)	2	S/A	A-4
63	09-445-297441	1/4-20 x 3/4 SCHS	2	S/A	A-2,A-3,A-5
70	09-50P-3070	FLEX Foot	1	S	
71	09-50P-3071	FLEX Foot Bracket	1	S	
72	09-50P-3072	FLEX Foot Cam	1	S	
73	09-50P-3073	FLEX Foot Cam Plate	1	S	
74	09-50P-3074	FLEX Foot Pad	1	S	
75	09-50P-3075	FLEX Adj SHCS 1/4-28 x 1.25"	2	S	
76	09-50P-3076	Washer .281 IDx.62 ODx.051" T	2	S	
77	09-50P-3077	BHCS #10-32 x .50"	2	S	
78	09-50P-3078	1/4 SH DIA x .50" SH. Bolt	1	S	
79	09-50P-3079	Belleville Disc Spring	1	S	
90	09-50P-3090	FLEX Adapter Foot	1	S	
	09-445-29801	FLEX Foot 3/16" Allen Wrench	1	S	

Powernail FLEX Assemblies, Kits and Accessories

ITEM	PART NO.	DESCRIPTION	QTY	KEY
A-1	09-200-3058A	Seal Kit (1 Each Of All Seals)	1	S
A-2	09-445-29759A	Long Handle Assembly	1	S
A-3	09-445-29760A	Short Handle Assembly	1	S
A-4	09-50P-3065A	Nail Channel Assembly (Standard)	1	S
A-5	09-445-29824A	Extra Long Handle Assembly	1	S
A-6	09-50P-3064A	Driving Blade Assembly w/Rubber Seat	1	S
A-7	09-AW-445	Allen Wrench Set (3/16 & 5/32)	1	S
A-8	09-445-29757A	6 Oz. Mobile Dte Light Oil	1	S
A-9	09-200-3063A	Nail Pusher Assembly	1	S
A-10	09-445-29765	3/8" X 50 Ft. Vinyl Hose with Fittings	1	S
A-11	09-445-29766	3/8" M & F Coupling Set	1	S
A-12	09-445-29768	Box Wrench (2)	2	S
A-13	09-445-5421	Air Gauge	1	S
A-14	09-445-5421R	Filter/Regulator Gauge	1	S

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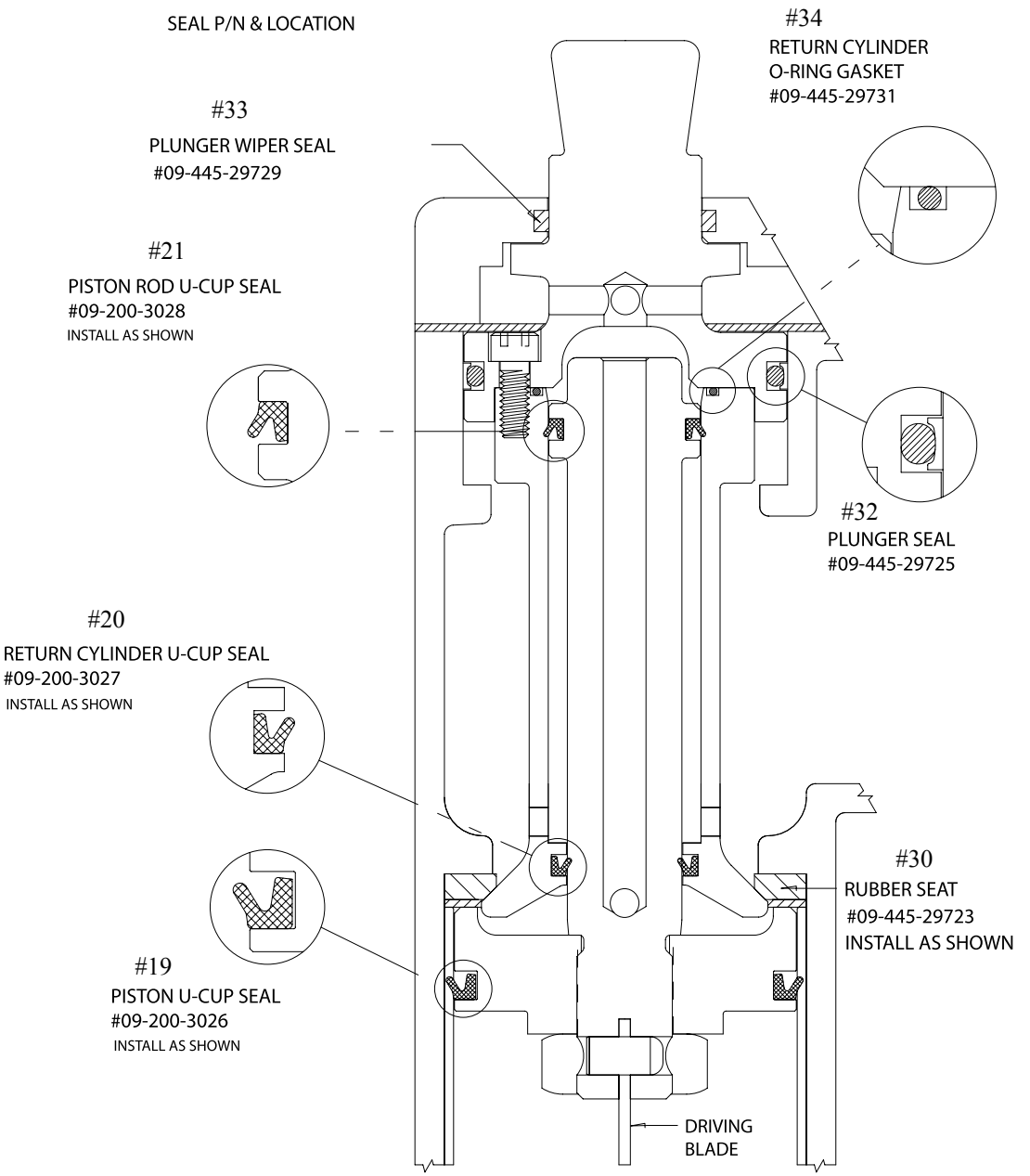
Seal Placement



Powernail FLEX Schematic

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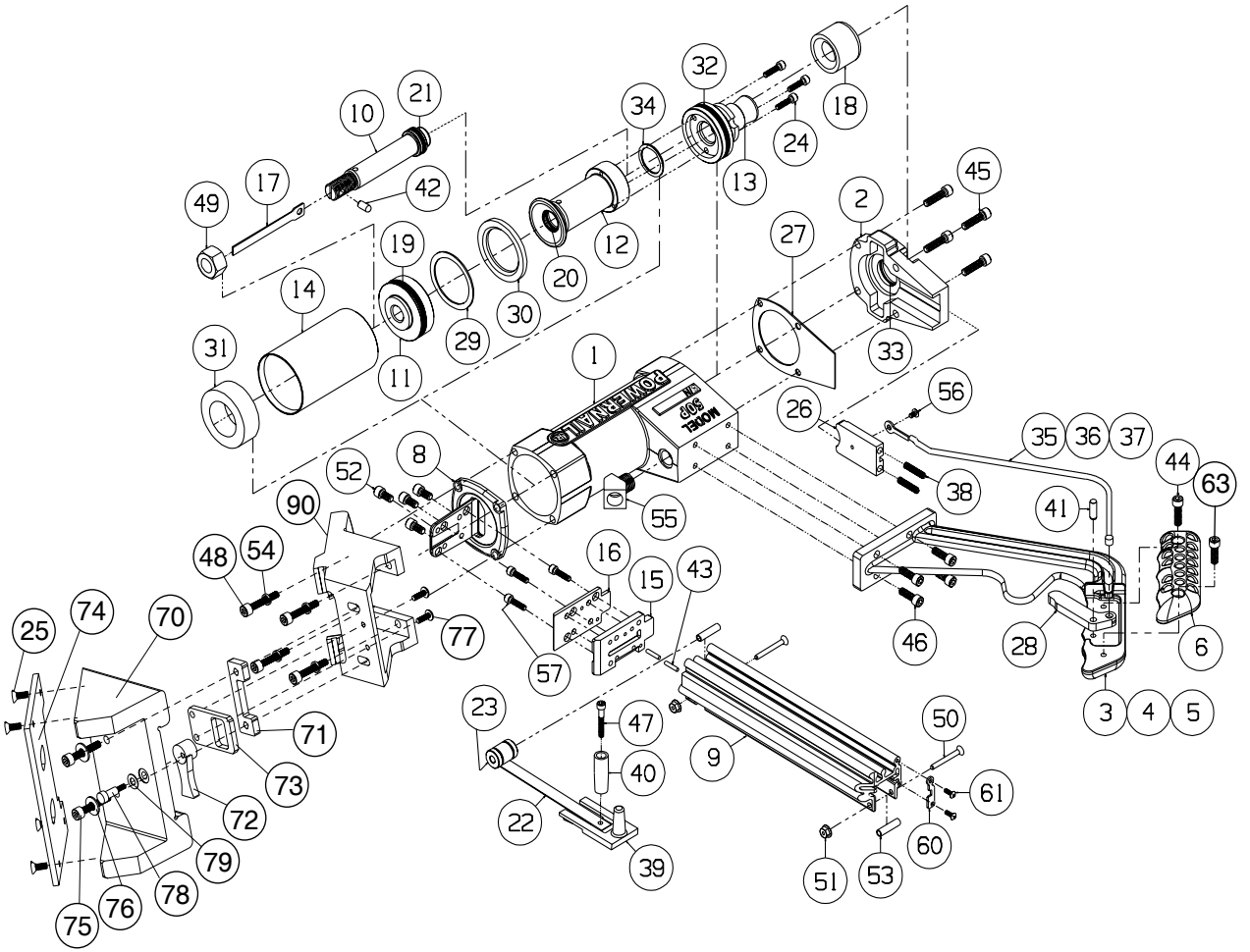

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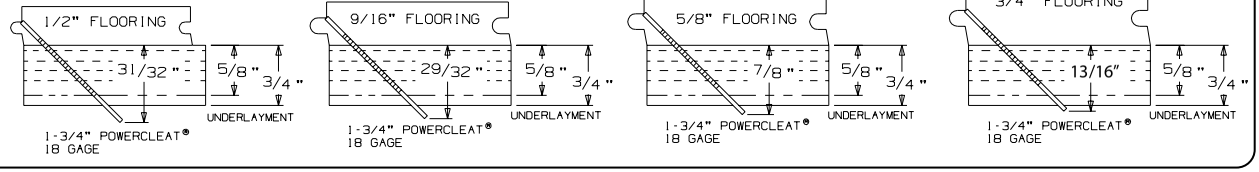
POWERCLEATS LENGTH DETERMINATION CHART

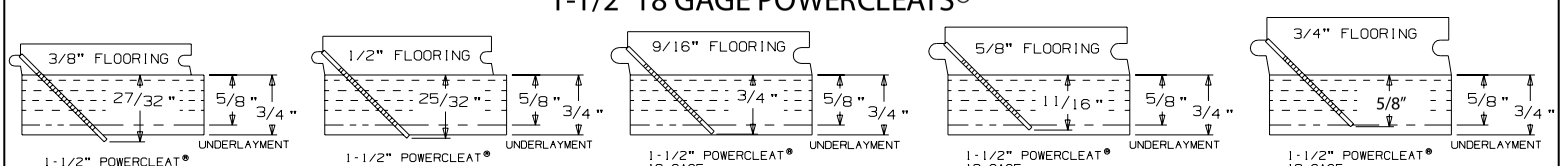
This chart will assist you in determining the proper length of Powercleats to use for various thicknesses of flooring. Approximate vertical penetration of the Powercleat under the hardwood floor is shown for each application. This is only a guide. Results should be tested in the field before proceeding.

Nail Penetration for 3/4" and 5/8" Underlayment

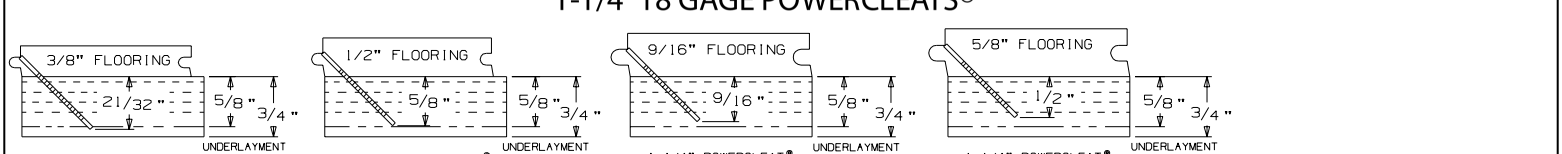
1-3/4" 18 GAGE POWERCLEATS®



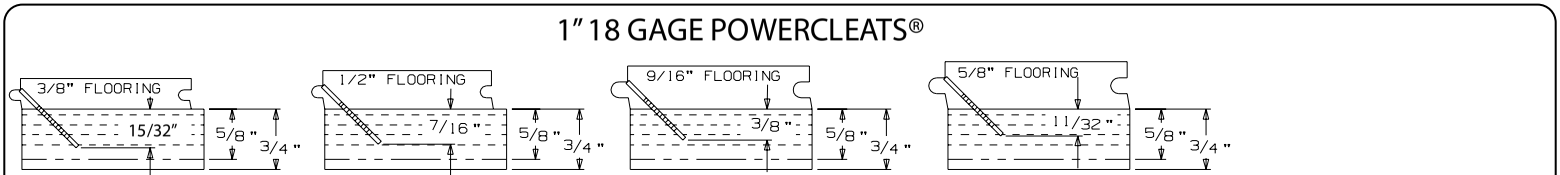
1-1/2" 18 GAGE POWERCLEATS®



1-1/4" 18 GAGE POWERCLEATS®



1" 18 GAGE POWERCLEATS®



POWERNAILER TROUBLE SHOOTING CHART

	PROBLEM	POSSIBLE CAUSE	SOLUTION
1	Driving blade does not retract	1. Zero or Low air pressure	Check air supply for 70 psi minimum to 110 psi maximum
		2. Lack of lubrication	Manually lubricate through male air inlet fitting
		3. Excessive dirt inside nailer	Disassemble and clean
		4. Bent or burred driving blade	Replace driving blade
		5. Seals worn out	Replace all seals
		6. U-Cup Lip Seals installed upside down	Replace all seals
2	Driving blade retracts slowly	1. Low air pressure	Turn up air pressure to 70-110 psi max
		2. Bent or burred driving blade	Replace driving blade
		3. Air supply restricted by small orifice	Use 1/4" minimum diameter air fittings
		4. U-Cup Lip Seals installed upside down	Replace all seals
		5. Excessive dirt inside nailer	Disassemble, clean and lubricate
3	Nail is not countersunk	1. Low air pressure	Turn up air pressure to 70-110 psi max
		2. Broken Driving Blade	Replace Driving Blade
		3. Nail hit hard surface	Move from obstruction
		4. Piston U-Cup Lip Seal installed upside down	Replace all seals
		5. Driving blade jam nut came loose	Retighten or replace jam nut
		6. Worn out gate	Replace gate.
4	Nailer leaks air	1. Air supply fittings loose	Tighten all air line fitting connections
		2. Excess air pressure blew out seals	Check air supply for 110 psi maximum—replace all seals
		3. Plunger screws loose	Tighten 3 plunger screws
		4. Cracked or damaged body	Replace body
		5. Seals worn out	Replace all seals
		6. Seals need to be seated	Dry fire Nailer
5	Bottom of nailer cracked off	1. Operated without rubber bumper installed	Replace damaged parts
		2. Excessive air pressure used	Replace damaged parts
6	Nails jam in nailer	1. Not using 18 gage Powercleats nails	Use 18 gage Powercleats nails only
		2. Continued use after a short hit	Clear nail immediately after short hit
		3. Nail pusher damaged or spring broken	Replace nail pusher assembly
		4. Nail channel lose	Tighten nail channel retaining screws
		5. Bent nail stuck in nail guide	Disassemble and clear out bent nail
		6. Hit another set nail or hard object	Move from obstruction
		7. Nail gate worn out	Replace nail gate
7	Plunger locked up—won't move or fire	1. Safety trigger not being depressed	Replace damaged plunger, safety yoke and plunger seal
		2. Lack of lubrication	Manually lubricate through male air inlet fitting